

CLAIMS

1. A compressor comprising:

a hermetic container storing oil in it,
an electric motor including a stator and a
rotor which are contained in said hermetic container,
and a compressor unit linked to be driven by said
electric motor,

said compressor unit including a shaft that
is extending in the vertical direction and making
rotating motion by said electric motor, and an oil
pump which is formed at the lower end of said shaft
and connected to said oil,

wherein:

said oil pump includes a helical groove
provided on the outer periphery of said shaft, a cup-
shaped sleeve which loosely covers the outer
peripheral lower end part of said shaft so that it
covers the lower end of said helical groove and is
coupled so as to be free in rotational relation from
said shaft, and rotation-suppressing means for
suppressing the rotation of said sleeve.

2. A compressor in accordance with Claim 1
in that said rotation suppression means is a bracket,
which is held between said stator and said sleeve and

fixes said sleeve to said stator.

3. A compressor in accordance with Claim 1 in that said rotation suppression means is wings formed on the outer periphery of said sleeve and generates a viscous resistance with respect to the oil.

4. A compressor in accordance with Claim 1 in that said rotation suppression means is rotating permanent magnets fixed directly or indirectly to both the said sleeve and the said hermetic container, and a member which magnetically acts to them.

5. A compressor in accordance with either one of Claim 1 through Claim 4 in that said shaft has, along its shaft axis, a vertical hole which is extending in the vertical direction and is connected to the sliding-motion part formed between the shaft and a shaft receiving member which receives said shaft allowing the sliding and rotating motion therebetween, and the upper end of said helical groove is connected to said vertical hole.

6. A compressor in accordance with either one of Claim 1 through Claim 5 in that said sleeve is

formed with synthetic resin by integration molding.

7. A compressor in accordance with either one of the Claim 1 through the Claim 6, wherein said compressor unit is supported elastically in said hermetic container.

8. A compressor in accordance with either one of the Claim 1 through the Claim 7, wherein said motor unit is driven in operation frequencies including frequencies lower than the power source frequency.